

# Professional Relationships between Midwives and Physicians: Collaboration or Conflict?

## ABSTRACT

This study examines the professional relationships between midwives and physicians providing obstetrical care in Washington State. Four hundred ninety-six randomly sampled family physicians and obstetrician-gynecologists and 211 certified nurse, licensed, and lay midwives were surveyed to learn more about midwife/physician consulting relationships. Only certified nurse midwives have forged mutually satisfactory relationships with the physician community. Increased hospital-based training and practice opportunities are needed before licensed midwives can improve their professional relationships with physicians. (*Am J Public Health*. 1992;82:262-264)

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## Introduction

Midwives have become increasingly important birth attendants in Washington State, particularly as many family physicians and obstetricians have discontinued their obstetrical practices because of malpractice liability concerns.<sup>1</sup> The proportion of births attended by licensed and certified nurse midwives increased more than fortyfold between 1975 and 1989, from less than 1% to 4.6% of all births (P. Starzyk, personal communication, May 1991).<sup>2</sup> In 1989, 3436 Washington birth records listed a midwife as the attendant. Since 1988, six clinics, each designed to serve over 300 low-income pregnant women per year, have been established in Washington using certified nurse midwives as providers. One barrier to the further growth of midwifery has been the development of functional, mutually satisfying professional relationships between midwives and physicians. We surveyed Washington's obstetricians, family physicians, and midwives to better understand the nature of their professional relationships.

## Methods

We identified 64 certified nurse midwives and 68 licensed midwives registered with Washington's Department of Licensing in 1987, as well as 79 lay midwives—66 identified by a Christian lay midwifery organization and 13 by the Department of Licensing. Because lay midwives are not licensed, our sample may not be truly representative of this group. Certified nurse midwives are registered nurses with advanced training in midwifery in a program accredited by the American College of Nurse-Midwives.<sup>3</sup> Licensed midwives consist mainly of graduates of the Seattle Midwifery School, a 27-month program for students who have completed at least 2 years of college.<sup>4</sup> Washington is unusual in having a large group of professional, nonnurse midwives who are recognized and licensed by the state. Lay midwives are allowed to practice in Washington

State without any specific educational requirements but cannot advertise or charge for their services.<sup>2</sup> We also identified 496 family physicians and obstetrician-gynecologists randomly sampled from the 1988 American Medical Association directory's listing of Washington physicians.<sup>5</sup>

To describe the geographic distribution of midwives and physicians, we aggregated Washington's 39 counties into 4 categories. Urban counties are those with 76% to 100% of the population living in an urban area, semiurban 51% to 75%, semi-rural 26% to 50%, and rural 0% to 25%. In Washington State, 4 counties are classified as urban, 15 as semiurban, 8 as semi-rural, and 12 as rural.

Two survey mailings were sent to midwives and physicians in the summer of 1988 asking questions regarding physician/midwife demographics, practice characteristics, and consultation and referral relationships. After excluding those providers who had retired, died, or recorded a different specialty, 51% of physicians (234/458), 66% of certified nurse midwives (42/64), 71% of licensed midwives (48/68), and 42% of lay midwives (33/78) responded to the questionnaire.

## Results

Ninety percent of obstetricians (45/50), 37% of family physicians (66/180), 69% of certified nurse midwives (29/42), 71% of licensed midwives (34/48), and 48% of lay midwives (16/33) were providing some component of obstetrical care in 1988. Nearly all practicing midwives provided prenatal care, but certified nurse

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This paper was submitted to the journal June 26, 1990, and accepted with revisions July 18, 1991.

TABLE 1—Practice Characteristics of Obstetrical Care Providers

	Physicians		Midwives		
	Obstetricians (n = 45)	Family physicians (n = 66)	Certified nurse (n = 29)	Licensed (n = 34)	Lay (n = 16)
Average no. of deliveries in 1987	142	39	83	38	15
Average years in practice	13	12	8	7	7
Private practice, %	80	79	31	97	99

TABLE 2—Practice Location of Obstetrical Care Providers

Practice location, %	Physicians		Midwives		
	Obstetricians (n = 45)	Family physicians (n = 66)	Certified nurse (n = 29)	Licensed (n = 34)	Lay (n = 16)
Urban	62	51	69	54	7
Semiurban	27	29	19	27	65
Semirural	11	11	4	19	14
Rural	0	9	8	0	14

midwives (86%) and lay midwives (81%) attended deliveries to a lesser extent than licensed midwives (97%). Obstetricians and certified nurse midwives attended the greatest number of deliveries (Table 1). Most physicians and midwives practiced in urban and semiurban counties (Table 2), while few lay midwives practiced in urban counties.

Certified nurse midwives (69%) worked primarily as employees of hospitals or physicians, while licensed and lay midwives were almost exclusively in private practice. Certified nurse midwives attended the majority of their deliveries in birthing centers or hospitals (76%), while licensed and lay midwives attended deliveries almost exclusively in the home (91% and 99%, respectively).

Nearly 67% of obstetricians and 44% of family physicians had consulted for or received a referral from a midwife at some point in their medical practice. Fifty-six percent of obstetricians and 32% of family physicians practicing obstetrics had an existing referral relationship with a midwife in 1987. Of those who had not worked with a midwife, 50% of obstetricians and 51% of family physicians stated that they would be willing to do so. Seventy-six percent of all physicians practicing obstetrics felt that midwives can provide an acceptable alternative to physician care for low-risk pregnancies. No physician was willing to attend a home delivery, however.

Of the practicing midwives, 100% of certified nurse midwives (29), 97% of licensed midwives (33), and 50% of lay midwives (8) had an existing referral relation-

TABLE 3—Midwife/Physician Relationships

	Certified Nurse Midwives (n = 29)	Licensed Midwives (n = 33)	Lay Midwives (n = 8)
Referral relationship with, %:			
Obstetrician	89	66	38
Family physician	11	34	38
Naturopath	0	0	25
Midwife-initiated relationship, %	17	88	88
Length of relationship, y	5	4	3
Written contract with physician, %	62	6	0
Regularly scheduled meetings/contact with physician, %	52	0	13
Average miles to physician practice	5	8	23

ship with a physician. Certified nurse midwives predominantly consulted with and referred to obstetricians, while licensed and lay midwives had referral relationships with both obstetricians and family physicians (Table 3). Referral relationships for certified nurse midwives generally were established by their place of employment or the consulting physician (83%), while licensed and lay midwives usually approached physicians directly. Sixty-two percent of certified nurse midwives had a written contract; 52% met regularly with a physician to maintain their professional relationships.

Sixty-nine percent of certified nurse midwives felt that no changes were needed in their referral relationships. Virtually all licensed midwives, however, wanted to establish more formal referral relationships with physicians. Midwives sought increased respect, appreciation, and communication from their physician

colleagues. They also wanted greater integration with the traditional medical system through support for hospital privileges, more physicians willing to provide backup, and insurance coverage for home deliveries.

## Discussion

Midwives are not a homogeneous group. Certified nurse midwives are closely aligned with traditional obstetrical services. They perform large volumes of deliveries, usually within hospitals in urban and semiurban counties. Lay midwives are most distant from the established medical community. Those we were able to contact either had no professional relationship or had informal, short-term relationships with physicians. Licensed midwives occupy an uncomfortable middle ground. They deliver almost exclusively in the home, yet rely on physicians—who, as a rule, refuse

to perform or assist in home deliveries—for consultation and referral. This group has developed less formal and less satisfying relationships with physicians than have certified nurse midwives.

Certified nurse midwives have developed a role in the institutionally based obstetrical care system, through which they are helping address problems of access for economically disadvantaged populations in Washington. Licensed and lay midwives have practiced primarily outside the mainstream of medicine. Without formal training and licensing, lay midwives will continue to practice in this manner. Li-

censed midwives, despite their status as licensed birth attendants, have been dissatisfied with their consulting relationships with physicians. Hospital-based training and practice opportunities must be developed if licensed midwives are to play a more significant role in providing obstetric care in Washington State. □

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## ABSTRACT

Factors associated with artificial feeding were analyzed for 3285 infants in Shanghai. Boys, those from more highly educated families, and those born by assisted delivery or by cesarean section were more likely to be artificially fed than were girls, those from less educated families, and those born by spontaneous delivery. Infants whose birth weight was around 3750 g had the lowest probability of artificial feeding; higher and lower birth weights were positively associated with artificial feeding. (*Am J Public Health*. 1992;82:264-266)

# Factors Associated with Artificial Feeding in Shanghai

Yue Chen, MD, PhD

## Introduction

Artificial feeding has been documented as an important risk factor in increased mortality and morbidity from respiratory illness, gastroenteritis, and otitis.<sup>1-4</sup> In China, pneumonia and diarrhea are the most common diseases in infants and children.<sup>5</sup> Because breast-feeding makes a unique, fundamental contribution to the health of infants, the reasons for unsuccessful breast-feeding are important concerns.<sup>6,7</sup>

Factors found to be related to artificial feeding have been diverse and inconsistent. The amount of information available for some geographic areas is sparse; in particular, very little information is available for China, the world's most populous country.

In Shanghai, one third of the mothers studied did not initiate breast-feeding.<sup>3,4</sup> The proportion of artificial feeding was surprisingly high compared with the findings from other developing countries or even some developed countries.<sup>6-8</sup> This paper presents information on some factors associated with the infant-feeding practices of mothers in Shanghai.

## Methods

This analysis was performed on the combined data from the Jing-An and Chang-Ning epidemiological studies of

children's health in Shanghai.<sup>9,10</sup> A detailed description of the populations and methodology has been published elsewhere.<sup>9,10</sup> All together, the data of 3285 infants from these two studies were used in this analysis.

The relationship between birth weight and the proportion of artificial feeding was U-shaped. Nonlinear regression<sup>11</sup> was used to estimate parameter values for the model

$$\text{artificial feeding} = a + b(\text{birth weight} - c)^2.$$

A multiple logistic regression model was used to examine the individual contribution of each risk factor to proportion of artificial feeding. The transformed values of birth weight,  $(\text{birth weight} - c)^2$ , were used to fit the model. All other variables were treated categorically.

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This paper was submitted to the journal August 27, 1990, and accepted with revisions June 19, 1991.